United States Environmental Protection Agency

Region 9 Enforcement Division
75 Hawthorne Street
San Francisco, CA 94105

Inspection Date(s):	August 22, 2019	
Time:	**Entry:** 7:45 am	**Exit:** 2:30 pm
Media:	Water	
Regulatory Program(s)	Clean Water Act NPDES	
Company Name:	Dos Cuadras Offshore Resources, LLC (DCOR)	
Facility or Site Name:	Platform Habitat	
Facility/Site Physical Location:	Platform Gilda, Santa Barbara Channel, Pacific Ocean Lease OCS-P-0216	
Geographic Coordinates:	34°10'56.42"N, 119°25'6.83"W	
Mailing address:	290 Maple Court, Suite 290 Ventura, CA 93003	
Facility/Site Contact:	Jay Rao	**Title**: Environmental Engineer
	Phone: 805-535-2078	**Email**: jrao@dcorllc.com
Facility/Site Identifier:	NPDES Permits CAG280000 and CAF001152	
NAICS:	211111 - Crude petroleum and natural gas extraction	
SIC:	1311	
Facility/Site Personnel Participating in Inspection:		

Name	Affiliation	Title	Email
Jay Rao	DCOR	Environmental Engineer	jrao@dcorllc.com
Sean Smith	DCOR	Lead Operator	ssmith@dcorllc.com
EPA Inspector(s):			
Adam Howell	US EPA	Environmental Engineer	Howell.Adam@epa.gov
Michael Weiss	US EPA	Environmental Engineer	Weiss.Michael@epa.gov

Inspection Report Author:	Adam Howell ADAM HOWELL Digitally signed by ADAM HOWELL Date: 2019.10.22 09:53:33 -07'00'	415-947-4248
		Date:
Supervisor Review:	Eric Magnan	415-947-4179
	ERIC MAGNAN Digitally signed by ERIC MAGNAN Date: 2019.10.18 18:18:59 -07'00'	**Date:**

SECTION I – INTRODUCTION

I.1 Purpose of the Inspection

On August 22, 2019, Adam Howell and Michael Weiss from the U.S. EPA Region 9 Enforcement Division (hereafter, we or inspection team) conducted a Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) inspection of the DCOR, LLC (DCOR or Discharger) – Platform Gilda (hereafter, Facility or Platform) offshore oil and gas platform. The purpose of the inspection was to evaluate compliance with the requirements of the EPA Region 9 NPDES Permit Nos. CAG280000 and CAF001152 (hereafter, Permit).

During the inspection we evaluated the accuracy and reliability of the Discharger's self-monitoring and reporting program and the Facility onsite generated waste streams, treatment processes, and discharges to the Pacific Ocean. The unannounced inspection (our original target was Gina, but we decided to go to Gilda instead while onboard the crew boat) consisted of two parts: a records review and a general Facility walk through. The onsite Facility Representatives were Jay Rao (Environmental Engineer, DCOR), and Sean Smith (Lead Operator). Upon arriving at the Platform on August 22, 2019, we met with the Facility Representatives, and presented our CWA credentials and explained the purpose of the inspection.

SECTION II – FACILITY / SITE DESCRIPTION

II.1 Facility Description

Platform Gilda is located in the Santa Barbara Channel and produces oil and gas from the Santa Clara Field (Lease OCS-P-0234). The Platform was first installed in January, 1981 and began production in December, 1981. Platform Gilda is approximately 8.8 miles from land, has 96 well slots, and is at a water depth of 205 feet. As of October 1, 2017, Platform Gilda had a cumulative oil production of 39,478,000 bbls (barrels) and cumulative gas production of 48,762,000 mcf (thousand cubic feet).

At the time of the inspection, the Facility was in "production" operations, actively recovering hydrocarbons from the field formation. A Facility Representative stated that at the time of the inspection, the following NPDES discharges occur or may occur from the Facility:

- Produced Water Discharge (Discharge 002)
- Deck Drainage (Discharge 004)
- Sanitary and Domestic Wastes (Discharge 005)
- Desalination Unit Wastes (Discharge 007)
- Fire Control System Water (Discharge 008)

II.2 Wastewater Sources

Note the discharge number (i.e., Discharge 002) referenced throughout this report refers to the type of wastewater discharged at the corresponding outfall point as designated in the Permit. A general description of the process train(s) for each of the above-mentioned discharges is described below:

Solution recovered from the formation by both Platform Gilda and Platform Gina goes through a separator where "sour" natural gas is captured. Sour natural gas goes through an "Amine" plant to strip out hydrogen sulfide. Natural gas is then sent through a pipeline (Photograph 1) to shore for sale. Gross production fluids are combined with those from Platform Gina and sent via a different pipeline to Mandalay Onshore Treatment Facility, where oil is separated out for sale and produced water is pumped back to Gilda for injection and discharge (Discharge 002).

Deck drainage (washdown, rainwater, drip pan and work area drains – Discharge 004) is collected throughout the platform via floor drains into a sump tank on the Subdeck. The top most platform level (Drill Deck) and next level (Production Deck) are enclosed with berms and floor trenches that flow to the sump tank on the Subdeck. Fluid in the sump tank is commingled with gross production fluid and piped to Mandalay Onshore Treatment Facility.

Sanitary Wastewater (Discharge 005) is treated onsite at the Facility with a redFox FoxPac environmental marine sanitation device (MSD) Model No. RF 2000-FP with serial No. 5384, which is United States Coast Guard (USCG) approved (Photograph 2). The treated water is discharged (Discharge 005) to the Pacific Ocean via a pipe (Photograph 2). The onsite Facility representatives stated that the daily discharge water flow rate is estimated based on the number of people on the platform and the time spent per person. The MSD unit is sized for a maximum of 2,000 gallons per day (gpd).

Desalination (i.e., reverse osmosis) unit wastewater (Discharge 007) is generated during the process of creating freshwater from saltwater. The desalination unit (Photograph 3) discharges directly to the Pacific Ocean via a pipe.

Fire control system water (seawater released during training, testing, and maintenance of fire protection equipment – Discharge 008) is composed of pure seawater. The Fire control water is discharged through pipes to the Pacific Ocean without treatment.

II.3 Wastewater Treatment

Sanitary wastewater (Discharge 005) is the only wastewater stream to be treated onsite at the Facility. Discharge 005 is treated via a redFox MSD (Photograph 1). The self-contained treatment system is composed of an aeration chamber, flocculation, solids settling, media filtration, and disinfection. The Platform chlorinates the treated effluent and checks the chlorine residual daily. The MSD is serviced annually by a contractor. The MSD was shutdown from January 2019 – June 2019 when the platform was unoccupied.

Domestic and Sanitary Wastes (Discharge 005), Footnote 2, of the Permit states "any facility which properly operates and maintains a marine sanitation device (MSD) that was certified by the United States Coast Guard (USCG) under Section 312 of the Act shall be deemed to be in

compliance with permit limitations for sanitary wastes and the requirements for total residual chlorine do not apply."

II.4 Produced Water Sampling

Produced water is sampled every 12 hours from the port shown in Photograph 4 and analyzed onsite for hydrogen sulfide and Oil & Grease concentrations. Hydrogen sulfide tests are performed with paper test strips. Oil & Grease samples are analyzed using a photospectrometer (Photograph 5). Produced water flows are calculated from pump capacity and run times.

II.5 Compliance History

Discharge Monitoring Reports (DMRs) reviewed by the inspection team indicated one reported effluent violation during the period of review (July 2016 through July 2019). In December 2017 the reported concentration of hydrogen sulfide in produced water discharge was 0.00146 mg/L, higher than the effluent limit of 0.00139mg/L. Discharge of produced water was reported every month during the period of review. Reported flow values add up to an average annual discharge below the permitted maximum allowable annual discharge of 25,500,000 bbls. All other sources of wastewater discharge (sanitary, desalination, and fire control system) were in compliance.

SECTION III – OBSERVATIONS

- The NPDES permit, daily reports, and DMRs were all well organized and readily available on an electronic share drive accessible on the Platform. Daily log sheets were clear, well kept, and easy to understand (Photograph 6).

- The platform had significant rust and corrosion.

SECTION IV – AREAS OF CONCERN

The presentation of areas of concern does not constitute a formal compliance determination or violation.

1. While a certain amount of rust and corrosion is to be expected in a harsh marine environment, the Facility should ensure that the corrosion does not negatively impact the operations or safety of the Platform or its ability to comply with the Clean Water Act.

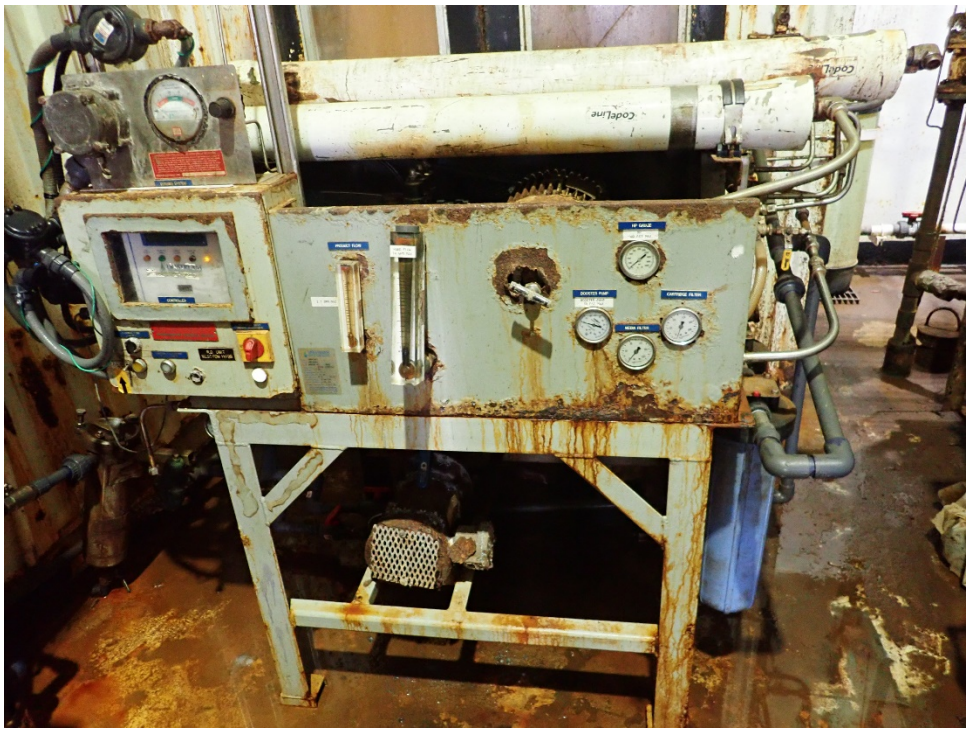
APPENDICES

Appendix 1 – Photograph Log

The photographs were taken during the inspection by Michael Weiss using an Olympus Tough TG-5 Digital Camera. Original copies of the photos are maintained by EPA Region 9.

Photograph 1: Pipeline gallery.

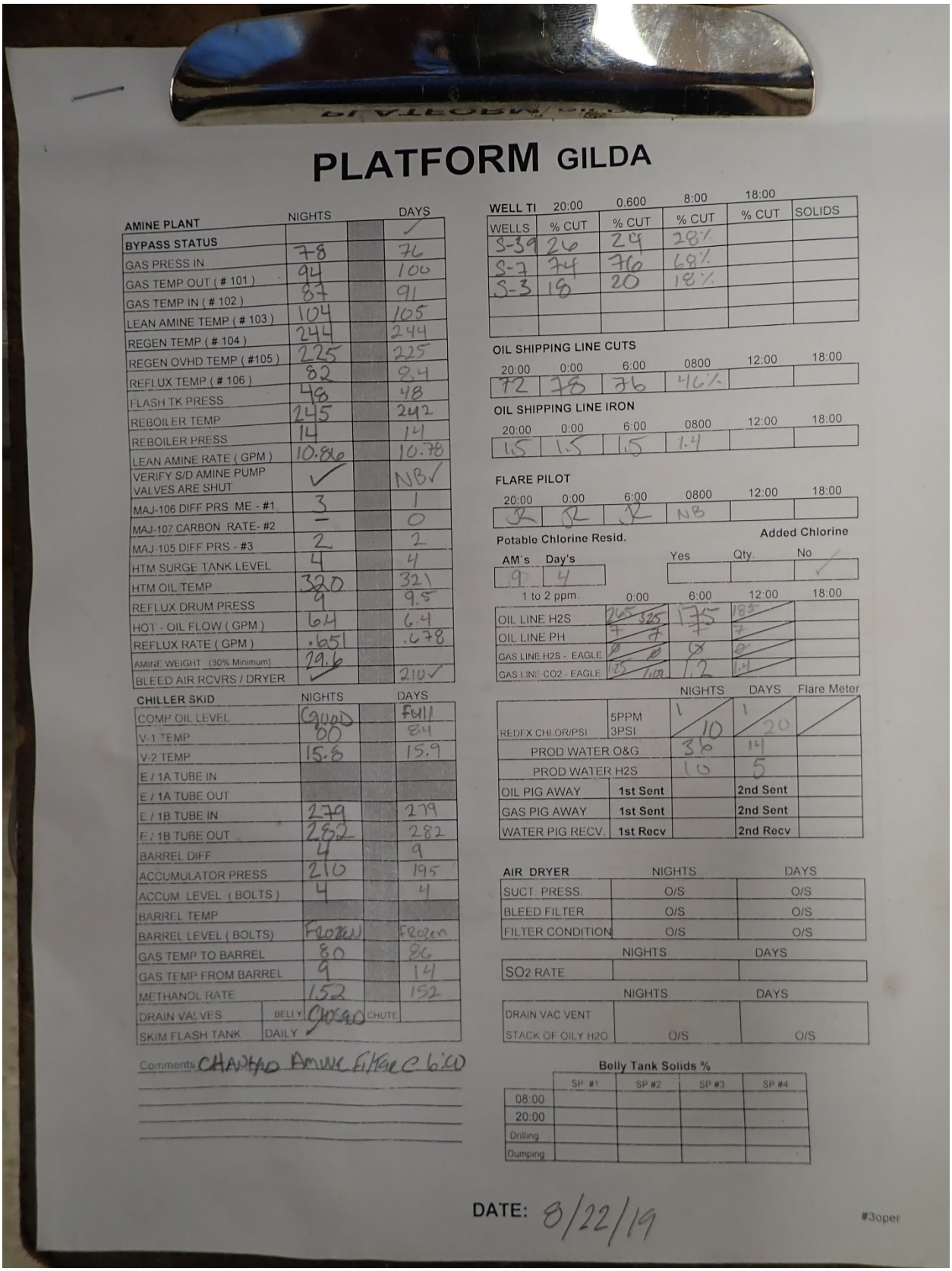
Photograph 2: Marine Sanitation Device.



Photograph 3:RO unit.

Photograph 4:Sample port for produced water discharge.

Photograph 5 : Photospectrometer for measuring Oil & Grease.



PLATFORM GILDA

AMINE PLANT	NIGHTS		DAYS
BYPASS STATUS			✓
GAS PRESS IN	78		76
GAS TEMP OUT (# 101)	94		100
GAS TEMP IN (# 102)	87		91
LEAN AMINE TEMP (# 103)	104		105
REGEN TEMP (# 104)	244		244
REGEN OVHD TEMP (#105)	225		225
REFLUX TEMP (# 106)	82		84
FLASH TK PRESS	48		48
REBOILER TEMP	245		242
REBOILER PRESS	14		14
LEAN AMINE RATE (GPM)	10.86		10.78
VERIFY S/D AMINE PUMP VALVES ARE SHUT	✓		NB✓
MAJ-106 DIFF PRS ME - #1	3		1
MAJ-107 CARBON RATE- #2	—		0
MAJ-105 DIFF PRS - #3	2		2
HTM SURGE TANK LEVEL	4		4
HTM OIL TEMP	320		321
REFLUX DRUM PRESS	9		9.5
HOT - OIL FLOW (GPM)	64		6.4
REFLUX RATE (GPM)	.651		.678
AMINE WEIGHT (30% Minimum)	29.6		
BLEED AIR RCVRS / DRYER	✓		210✓

CHILLER SKID	NIGHTS		DAYS
COMP OIL LEVEL	GOOD		Full
V-1 TEMP	80		84
V-2 TEMP	15.8		15.9
E / 1A TUBE IN			
E / 1A TUBE OUT			
E / 1B TUBE IN	279		279
E / 1B TUBE OUT	282		282
BARREL DIFF	4		9
ACCUMULATOR PRESS	210		195
ACCUM. LEVEL (BOLTS)	4		4
BARREL TEMP			
BARREL LEVEL (BOLTS)	FROZEN		Frozen
GAS TEMP TO BARREL	80		86
GAS TEMP FROM BARREL	9		14
METHANOL RATE	152		152
DRAIN VALVES — BELLY	CHOKED	CHUTE	
SKIM FLASH TANK — DAILY	✓		

Comments: CHANGED AMINE FILTER C-6100

WELL TI	20:00	0:600	8:00	18:00	
WELLS	% CUT	% CUT	% CUT	% CUT	SOLIDS
S-39	26	24	28%		
S-7	74	76	68%		
S-3	18	20	18%		

OIL SHIPPING LINE CUTS

20:00	0:00	6:00	0800	12:00	18:00
72	78	76	46%		

OIL SHIPPING LINE IRON

20:00	0:00	6:00	0800	12:00	18:00
1.5	1.5	1.5	1.4		

FLARE PILOT

20:00	0:00	6:00	0800	12:00	18:00
JR	JR	JR	NB		

Potable Chlorine Resid.

AM`s	Day's
9	4

Added Chlorine

Yes	Qty.	No
		✓

1 to 2 ppm.	0:00	6:00	12:00	18:00
OIL LINE H2S	245 / 325	175	185 /	
OIL LINE PH	7 / 7	7	7 /	
GAS LINE H2S - EAGLE	0 / 0	0	0 /	
GAS LINE CO2 - EAGLE	1.25 / 1.00	1.2	1.4 /	

		NIGHTS	DAYS	Flare Meter
REDFX CHLOR/PSI	5PPM 3PSI	1 / 10	1 / 20	/
PROD WATER O&G		3.6	14	
PROD WATER H2S		10	5	
OIL PIG AWAY	1st Sent		2nd Sent	
GAS PIG AWAY	1st Sent		2nd Sent	
WATER PIG RECV.	1st Recv		2nd Recv	

AIR DRYER	NIGHTS	DAYS
SUCT. PRESS.	O/S	O/S
BLEED FILTER	O/S	O/S
FILTER CONDITION	O/S	O/S

	NIGHTS	DAYS
SO_2 RATE		

	NIGHTS	DAYS
DRAIN VAC VENT		
STACK OF OILY H2O	O/S	O/S

Belly Tank Solids %

	SP #1	SP #2	SP #3	SP #4
08:00				
20:00				
Drilling				
Dumping				

DATE: 8/22/19

#3oper

Photograph 6 : Daily log sheet.